



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-0452; Project Identifier MCAI-2021-01356-A]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Piaggio Aero Industries S.p.A Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain Piaggio Aero Industries S.p.A (Piaggio) Model P-180 airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as accumulation of water and subsequent freezing in the pitot-tube, which results in pitot-tube blockage. This proposed AD would require modifying the total air temperature (TAT) probe heater electrical circuit and revising your existing airplane flight manual (AFM). The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Piaggio Aero Industries S.p.A, P-180 Customer Support, Via Pioieri e Aviatori d'Italia snc, 16154 Genoa, Italy; phone: +39 010 099 8400; email: [technicalsupport@piaggioaviation.it](mailto:technicalsupport@piaggioaviation.it); website: <https://www.technicalsupport@piaggioaerospace.it.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0452; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the MCAI, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: [mike.kiesov@faa.gov](mailto:mike.kiesov@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0452; Project Identifier MCAI-2021-01356-A” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any

personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0144, dated June 19, 2019 (referred to after this as “the MCAI”), to address an unsafe condition on all Piaggio Model P.180 Avanti and Avanti II airplanes. The MCAI states:

Occurrences of pitot-tube blockage were reported, leading to in-flight air data loss. Investigation results indicated that accumulation of water and subsequent freezing was the failure cause.

This condition, if not corrected, could lead to unreliable indication or loss of in-flight air data provided by systems deriving their data from measuring air pressure, possibly resulting in loss of control of the aeroplane.

To address this potentially unsafe condition, Piaggio issued the applicable AFM TC [Piaggio Aviation P.180 AVANTI II/EVO Temporary Change 79, dated September 17, 2018; and Piaggio Aviation P.180 AVANTI Temporary Change No. 36 and No. 79], providing instructions to switch on pitot-tube heater before taxi if operation in heavy rain, snow or icing condition is expected. To prevent concurrent activation of TAT probe heater on ground, which could lead to temporary air data indications failure, Piaggio issued the applicable SBs [Piaggio

Service Bulletin No. 80-0430 Revision 1 and Piaggio Service Bulletin No. 80-0457, original issue], providing modification instructions to inhibit on-ground power supply to TAT probe heater, when the pitot-tube heater is activated.

For the reasons described above, this [EASA] AD requires amendment of the applicable AFM and, for certain aeroplanes, modification of the TAT probe heater electrical circuit.

You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0452.

### **Related Service Information under 1 CFR Part 51**

The FAA reviewed Piaggio Aviation S.p.A. Service Bulletin No. 80-0430, Revision 1, dated April 30, 2019; and Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0457, Revision 1, dated February 12, 2020. These service bulletins specify procedures for modifying the TAT heater circuit in order to inhibit its engagement on the ground when the pitot heater is turned on. These documents are distinct because they apply to airplanes in different configurations.

The FAA reviewed Piaggio Aviation P.180 AVANTI II/EVO Temporary Change No. 79, dated September 17, 2018. Temporary Change (TC) 79 revises the Limitations and Normal Procedures sections of the existing AFM to include updated procedures for airplane operation when the modification for inhibition of the TAT heater (on ground) has been installed.

The FAA also reviewed Piaggio Aviation P.180 AVANTI Temporary Change No. 36, dated April 11, 2019. TC 36 revises the Emergency and Normal Procedures sections of the existing AFM to include additional procedures to avoid air data computer (ADC) failure due to water trapped and frozen in pitot lines.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Other Related Service Information**

The FAA reviewed Piaggio Aero Industries Service Bulletin No. 80-0454, Revision 0, dated March 6, 2017; Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0425, Revision 0, dated May 30, 2017; and Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0425, Revision 2, dated June 4, 2018. This service information specifies

procedures for replacing the Messier-Dowty nose and main landing gear and steering system with a Magnaghi nose and main landing gear and Eaton steering system.

The FAA also reviewed Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0430, Revision 0, dated August 10, 2017. This service information specifies procedures for modifying the TAT heater circuit in order to inhibit its engagement on the ground when the pitot heater is turned on.

#### **FAA's Determination**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this NPRM after determining the unsafe condition described previously is likely to exist or develop on other products of the same type design.

#### **Proposed AD Requirements in this NPRM**

This proposed AD would require accomplishing the actions specified in the service information already described.

#### **Differences Between this Proposed AD and the MCAI**

The MCAI requires informing all flight crews of the AFM revisions and operating accordingly thereafter, and this proposed AD would not because those actions are already required by FAA operating regulations.

#### **Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 101 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor Cost	Parts Cost	Cost per airplane	Cost on U.S. operators
Modify TAT probe heater electrical circuit	42 work-hours x \$85 per hour = \$3,570	Up to \$3,632	Up to \$7,202	Up to \$496,938 (69 airplanes)
Revise AFM	1 work-hour x \$85 per hour = \$85	Not Applicable	\$85	\$8,585 (101 airplanes)

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**Piaggio Aero Industries S.p.A:** Docket No. FAA-2022-0452; Project Identifier MCAI-2021-01356-A.

#### **(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Piaggio Aero Industries S.p.A Model P-180 airplanes, all serial numbers (S/Ns), certificated in any category.

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code 3411, Pitot/Static System.

#### **(e) Unsafe Condition**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as accumulation of water and subsequent freezing in the pitot-tube. The FAA is issuing this AD to prevent blockage of the pitot-tube. The unsafe condition, if not addressed, could

result in temporary air data indications failure, which could result in loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

(1) For all airplanes: Within 30 days after the effective date of this AD, revise the existing airplane flight manual (AFM) for your airplane by adding into the Emergency Procedures and Normal Procedures sections the information in Piaggio Aviation P.180 AVANTI Temporary Change No. 36, dated April 11, 2019; or by incorporating into the Limitations and Normal Procedures sections the information in Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 79, dated September 17, 2018; as applicable to your airplane S/N. Using a different document with language identical to that in Piaggio Aviation P.180 AVANTI Temporary Change No. 36, dated April 11, 2019; or Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 79, dated September 17, 2018, is acceptable for compliance with this requirement.

(2) For airplanes identified in paragraph (g)(2)(i) and (ii) of this AD: Within 660 hours time-in-service (TIS) after the effective date of this AD or 24 months after the effective date of this AD, whichever occurs first, modify the total air temperature (TAT) probe heater electrical circuit by following the Accomplishment Instructions, paragraphs (6) through (27), in Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0457, Revision 1, dated February 12, 2020.

(i) S/N 1105, if Piaggio Aero Industries Service Bulletin No. 80-0454, Revision 0, dated March 6, 2017, is not incorporated; and

(ii) S/Ns 1106 through 1234 inclusive, if Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0425, Revision 2, dated June 4, 2018, is not incorporated.

(3) For airplanes identified in paragraphs (g)(3)(i) through (iii) of this AD: Within 660 hours TIS after the effective date of this AD or 24 months after the effective date of this AD, whichever occurs first, modify the TAT probe heater electrical circuit by following the Accomplishment Instructions, paragraphs (6) through (21), in Piaggio



Aviation S.p.A. Service Bulletin No. 80-0430, Revision 1, dated April 30, 2019.

(i) S/Ns 1002, 3001, 3003, 3004, 3006, and 3007;

(ii) S/N 1105, if Piaggio Aero Industries Service Bulletin No. 80-0454, Revision 0, dated March 6, 2017, is incorporated; and

(iii) S/Ns 1106 through 1234 inclusive, if Piaggio Aero Industries S.p.A. Service Bulletin No. 80-0425, Revision 2, dated June 4, 2018, is incorporated.

**(h) Credit for Previous Actions**

This paragraph provides credit for the modification required by paragraph (g)(3) of this AD, if the modification was done before the effective date of this AD using Piaggio Aviation Service Bulletin No. 80-0430, Revision 0, dated August 10, 2017.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

(1) For more information about this AD, contact Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2019-0144, dated June 19, 2019, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0452.

(3) For service information identified in this AD, contact Piaggio Aero Industries S.p.A, P-180 Customer Support, Via Pioieri e Aviatori d'Italia snc, 16154 Genoa, Italy; phone: +39 010 099 8400; email: [technicalsupport@piaggioaviation.it](mailto:technicalsupport@piaggioaviation.it); website: <https://www.technicalsupport@piaggioaerospace.it.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

Issued on April 5, 2022.

Ross Landes, Deputy Director for Regulatory Operations,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2022-07621 Filed: 4/8/2022 8:45 am; Publication Date: 4/11/2022]